

ABSTRACT

[0031] The present invention is related to novel acid functional pigment dispersing agents. In particular, the invention is directed to novel polymers with acid functional groups for use as pigment dispersants. The novel polymers comprise polymeric amides with free carboxyl functional groups having the structure:



wherein PE is a polyester, PA is a polyamine and A is an anhydride. The novel pigment dispersants of the present invention are particularly effective for the dispersion of high color carbon black and organic pigments. The advantages of the novel pigment dispersants over known amine functional polymeric dispersants are several. They do not tend to discolor when exposed to UV light. They do not inhibit acid catalyzed reactions such as melamine crosslinking or react with isocyanate or catalyze the isocyanate/H₂O reaction. They are non-toxic or much less toxic to aquatic organisms. The novel dispersants, therefore can be used in acid catalyzed and isocyanate processes without the adverse effects of the prior art amine functional dispersants. Furthermore, the novel dispersants are environmentally safer.